





Practitioner's Docket No. MSU 4.1-458

PATENT



Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.' " M.P.E.P. § 601, 7th ed.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Linda S. Mansfield, Mary G. Rossano, Alice J. Murphy and

Ruth A. Vrable

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title): VACCINE TO CONTROL EQUINE PROTOZOAL MYELOENCEPHALITIS

IN HORSES

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date Feb. 24, 2000 in an envelope as "Express Mail Post Office to Addressee," mailing Label Number _EE488567620US dressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Peggy L. Casper

print name of person mailing paper)

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

> "Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

> > (New Application Transmittal [4-1]-page 1 of 11)

1. Type of Application

This new application is for a(n)

(check one applicable item below)

, , , , , , , , , , , , , , , , , , , ,
☑ Original (nonprovisional)
☐ Design
☐ Plant
WARNING: Do not use this transmittal for a completion in the Ú.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WARNING: Do not use this transmittal for the filing of a provisional application.
NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
☐ Divisional.
☐ Continuation.
☐ Continuation-in-part (C-I-P).
. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

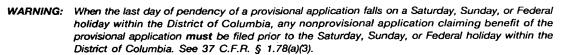
- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
 - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(I) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICA-TION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(New Application Transmittal [4-1]-page 2 of 11)



The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

3. Papers E	Enclosed
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Citations

A.			d for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 Application
44	_ Pa	ages	of specification
10	_ Pa	ages	of claims
_0	_ Sł	neets	s of drawing
WAR		filings of the Fo	O NOT submit original drawings. A high quality copy of the drawings should be supplied when any a patent application. The drawings that are submitted to the Office must be on strong, white, nooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the awings are necessary, they should be made to the original drawing and a high-quality copy of a corrected original drawing then submitted to the Office. Only one copy is required or desired. If comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G62).
NOTE	in: the or	vento e Offi o the	ying indicia, if provided, should include the application number or the title of the invention, r's name, docket number (if any), and the name and telephone number of a person to call if ce is unable to match the drawings to the proper application. This information should be placed back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top page " 37 C.F.R. § 1.84(c)).
			(complete the following, if applicable)
		"PE	enclosed drawing(s) are photograph(s), and there is also attached a TITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R84(b).
		form	nal
,		info	rmal
В.	Oth	er P	apers Enclosed
8	_ Pa	ages	of declaration and power of attorney
_1	_ Pa	ages	of abstract
	_ 0	ther	
A	dditi	onal	papers enclosed
		Am	endment to claims
			Cancel in this applications claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
			Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
		Pre	liminary Amendment
	X	Info	rmation Disclosure Statement (37 C.F.R. § 1.98)
	X	For	m PTO-1449 (PTO/SB/08A and 08B)

	Dec	claration of Biological Deposit
	per	omission of "Sequence Listing," computer readable copy and/or amendment taining thereto for biotechnology invention containing nucleotide and/or no acid sequence.
] Aut tive	horization of Attorney(s) to Accept and Follow Instructions from Representa-
] Spe	ecial Comments
	Oth	er
		on or oath (including power of attorney)
٠.	the pride by all of applications application the sign by a state of the person execution by all of the person executions applications a	y executed declaration is not required in a continuation or divisional application provided that or nonprovisional application contained a declaration as required, the application being filed is or fewer than all the inventors named in the prior application, there is no new matter in the tion being filed, and a copy of the executed declaration filed in the prior application (showing nature or an indication thereon that it was signed) is submitted. The copy must be accompanied aterment requesting deletion of the names of person(s) who are not inventors of the application filed. If the declaration in the prior application was filed under § 1.47, then a copy of that tition must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently ed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)–(3).
NOTE:	is direct abbrev country C.F.R.	aration filed to complete an application must be executed, identify the specification to which it ted, identify each inventor by full name including family name and at least one given name, without iation together with any other given name or initial, and the residence, post office address and or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 § 1.63(a)(1)–(4).
NOTE:	as pres as pres is that this pa	expectorship of a nonprovisional application is that inventorship set forth in the oath or declaration scribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration scribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under tragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name set of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).
×	En	closed
	Ex	ecuted by
		(check all applicable boxes)
	X	inventor(s).
		legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
		☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.
		t Enclosed.
NOTE:	the U. mav b	the filing is a completion in the U.S. of an International Application or where the completion of S. application contains subject matter in addition to the International Application, the application e treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE IEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.
		Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).
		(New Application Transmittal [4-1]—page 4 of 11)

(The declaration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inventorship Statement
WARNING: If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.
The inventorship for all the claims in this application are:
☑ The same.
or
 Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,
☐ is submitted.
☐ will be submitted.
7. Language
NOTE: An application including a signed oath or declaration may be filed in a language other than English. An English translation of the non-English language application and the processing fee of \$130.00 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. § 1.52(d).
☐ Non-English
☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).
8. Assignment Board of Trustees operating
An assignment of the invention to <u>Michigan State University</u>
301 Administration Bldg., MSU, East Lansing, MI 48824
is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCU- MENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached.
will follow.
NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
WARNING: A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.
A

Independent Claims (37 C.F.R. $\frac{17}{3}$ - $\frac{3}{3}$ = $\frac{-14}{3}$ × \$ 78.00 Multiple dependent claim(s),				ation(s)	of applica	Certified copy(ies)
Country from which priority is claimed is (are) attached. will follow. NOTE: The foreign application forming the basis for the claim for priority mus declaration. 37 C.F.R. § 1.55(a) and 1.63. NOTE: This item is for any foreign priority for which the application being filed U.S. application or International Application from which this application § 120 is itself entitled to priority from a prior foreign application, then co PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF CLAIMED. 10. Fee Calculation (37 C.F.R. § 1.16) A. IX Regular application CLAIMS AS FILED Number filed Number Extra Rate Total Claims (37 C.F.R. § 1.16(c)) Independent Claims (37 C.F.R. § 1.16(d)) Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) Amendment cancelling extra claims is enclosed. Amendment deleting multiple-dependencies is enclosed. Amendment deleting multiple-dependencies is enclosed. I the fees for extra claims are not paid on filing they must be paid or the opior to the expiration of the time period set for response by the Pate notice of fee deficiency. 37 C.F.R. § 1.16(d). Filing Fee Calculation B. Design application	Filed		Appln. No.			Country
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§ 1.16(b)) Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d)) ☐ Amendment cancelling extra claims is enclosed. ☐ Amendment deleting multiple-dependencies is enclosed. ☐ Fee for extra claims is not being paid at this time. NOTE: If the fees for extra claims are not paid on filing they must be paid or the opnor to the expiration of the time period set for response by the Pater notice of fee deficiency. 37 C.F.R. § 1.16(d). Filing Fee Calculation B. □ Design application						
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B. Design application	\$ 2,582.00	n			,	
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(New Application Transmittal [4-1]—page 6 of 11)

C.		Plant application (\$480.00—37 C.F.R. § 1.16(g))
		Filing fee calculation \$
11.	Smal	Il Entity Statement(s)
	X	Statement(s) that this is a filing by a small entity under 37 C.F.R. § 1.9 and 1.27 is (are) attached.
WA	ARNING	"Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).
WA	ARNING	"Small entity status must not be established when the person or persons signing the statement can unequivocally make the required self-certification." M.P.E.P., § 509.03, 6th ed., rev. 2, July 1996 (emphasis added).
		(complete the following, if applicable)
		Status as a small entity was claimed in prior application
		is being claimed for this application under: 35 U.S.C. §
		and which status as a small entity is still proper and desired.
		☐ A copy of the statement in the prior application is included.
		Filing Fee Calculation (50% of A, B or C above)
		\$ 1,291.00
NO	ar	ny excess of the full fee paid will be refunded if small entitiy status is established and a refund request re filed within 2 months of the date of timely payment of a full fee. The two-month period is not ktendable under § 1.136. 37 C.F.R. § 1.28(a).
12.	Requ	uest for International-Type Search (37 C.F.R. § 1.104(d))
		(complete, if applicable)
		Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

(New Application Transmittal [4-1]-page 7 of 11)

		_	nent Being Made at This Time	
•		Not	Enclosed	
			No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. subsequently.)	§ 1.16(e) can be paid
	X	Enc	losed	
		X	Filing fee	\$1,291.00
٠.		X	Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$40.00
			Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$
			For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
			Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$
			Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
NOTE	fa 3 e	ailing to 7 C.F ither ti	R. § 1.21(I) establishes a fee for processing and retaining any apply complete the application pursuant to 37 C.F.R. § 1.53(f) and R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the being basic filing fee must be paid, or the processing and retention year from notification under § 53(f).	this, as well as the changes to nefit of a prior U.S. application, n fee of § 1.21(I) must be paid,
			Total fees enclosed	\$ <u>1,331.00</u>
14. N			of Payment of Fees	
	X		eck in the amount of \$ 1,331.00	_
		Cha \$	arge Account No.	_ in the amount of
		A d	uplicate of this transmittal is attached.	
NOTE		ees sh 1.22(ould be itemized in such a manner that it is clear for which purpo b).	ose the fees are paid. 37 C.F.R.

15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

- The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 13-0610 :
 - 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
 - 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
- NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.
 - 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
 - 37 C.F.R. § 1.17(a)(1)–(5) (extension fees pursuant to § 1.136(a)).
 - 37 C.F.R. § 1.17 (application processing fees)
- NOTE: ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).
 - ☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).
- NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(New Application Transmittal [4-1]-page 9 of 11)

16. Instructions as to Overpayment

NOTE:	" Amounts of twenty-five dollars or less will not be returned unless specifically requested within
	a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may
	be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

☑ Credit Account No. 13-0610

□ Refund

Reg. No. 20,931

Tel. No. (517) 347-4100

Customer No. 21036

SIGNATURE OF PRACTITIONER

Ian C. McLeod

(type or print name of attorney)

2190 Commons Parkway

P.O. Address

Okemos, Michigan 48864

(New Application Transmittal [4-1]—page 10 of 11)

\mathbf{X}	Incom	poration by reference of added pages
	pr sta th	heck the following item if the application in this transmittal claims the benefit o rior U.S. application(s) (including an international application entering the U.S age as a continuation, divisional or C-I-P application) and complete and attach e ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)
	X	Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S Application(s) Claimed
		Number of pages added5
		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus added pages deleting names of inventor(s) named in prior application(s who is/are no longer inventor(s) of the subject matter claimed in this application. Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"
	u	Number of pages added
	State	ment Where No Further Pages Added
		no further pages form a part of this Transmittal, then end this Transmittal with is page and check the following item)
		This transmittal ends with this page.

(New Application Transmittal [4-1]—page 11 of 11)

ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED

NOTE: See 37 C.F.R. § 1.78.

17. Relate Back

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(complete the following, if applicable)

Amend the specification by inserting, before the first line, the following sentence:

A. 35 U.S.C. § 119(e)

NOTE: "Any nonprovisional application claiming the benefit of one or more prior filed copending provisional applications must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior provisional application, identifying it as a provisional application, and including the provisional application number (consisting of series code and serial number)." 37 C.F.R. § 1.78(a)(4).

This application claims the benefit of U.S. Provisional Application(s) No(s).:

APPLICATION NO(S).:	FILING DATE		
60 / 152,193	9/2/99		
/			
/			

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed
[4-1.1]—page 1 of 5)

3. 35	U.S.C. §§ 120, 121 and 365(c)	
NOTE:	"Except for a continued prosecution application filed under claiming the benefit of one or more prior filed copending applications designating the United States of America must first sentence of the specification following the title a reference to by application number (consisting of the series code and number and international filing date and indicating the references to other related applications may be made who § 1.78(a)(2).	nonprovisional applications or international to contain or be amended to contain in the se to each such prior application, identifying a serial number) or international application lationship of the applications Cross-
	☐ "This application is a	
	□ continuation	
	continuation-in-part	
	☐ divisional	
٠. (of copending application(s)	
	application number 0 /	filed on"
	International Application	filed on
	and which des	ignated the U.S."
NOTE:	The proper reference to a prior filed PCT application that e serial number and the filing date of the PCT application the	•
NOTE:	(1) Where the application being transmitted adds subject n the filing can be as a continuation-in-part or (2) if it is desire can be as a continuation.	
NOTE:	The deadline for entering the national phase in the U.S. for in the Notice of April 28, 1987 (1079 O.G. 32 to 46) as for	• •
	"The Patent and Trademark Office considers the Internation month from the priority date if the United States has been of Preliminary Examination has been filed prior to the expiration and until the 32nd month from the priority date if a Demar which elected the United States of America has been filed from the priority date, provided that a copy of the internation to the Patent and Trademark Office within the 20 or 30 minternational application has not been communicated to the 20 or 30 month period respectively, the international applications States 20 or 30 months from the priority date respectively. It as paragraph (h) of § 1.494 and paragraph (i) of § 1.495. A count of the priority date pendency of the	designated and no Demand for International on of the 19th month from the priority date of for International Preliminary Examination of prior to the expiration of the 19th month tional application has been communicated north period respectively. If a copy of the Patent and Trademark Office within the ation becomes abandoned as to the United these periods have been placed in the rules on tinuing application under 35 U.S.C. 365(c)
	"The nonprovisional application designated a	• • •
	U.S. Provisional Application(s) No(s).:	, claims the benefit of
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1	Where more than one reference is made about	ive, diease compline all references

into one sentence.

18. Relate Back—35 U.S.C. § 119 Priority Claim for Prior Application

The prior U.S. application(s), including any prior International Application designating the U.S., identified above in item 17B, in turn itself claim(s) foreign priority(ies) as follows:

		Country	Appln. no.	Filed on				
The certified copy(ies) has (have)								
		been filed on	, in prior application	0 /, wh	ich was			
		is (are) attached.						
WAF	RNING	the International Bure application In the coapplication communia U.S. serial number ustage is not entered. prosecution of a condocuments from the fit to request transfer, reenter and make a receithe priority document	the priority application that may had may not be relied on without any intinuing application. This is so be cated by the International Bureau inless the national stage is entered. So Therefore, such certified copies mitinuing application. An alternative wolders and transfer them to the contitrieve the folders, make suitable record of such copies in the Continuing in folders of International application. Notice of April 28, 1987 (1)	need to file a certified copy of to because the certified copy of to is placed in a folder and is not Such folders are disposed of if the ay not be available if needed later and be to physically remove to inuing application. The resource and notations, transfer the certified application are substantial. Ac ations that have not entered the	the priority the priority t assigned the national ater in the the priority as required and copies, accordingly,			
19.	Mai	ntenance of Cop	endency of Prior Appli	cation				
NOT	re		a copy of the petition filed in the papers constituting the filing of 0.G. 27).					
A.		Extension of time	in prior application					
	(This		npleted and the papers filed lod set in the prior applicati		n,			
		A petition, fee and until	response extends the term	in the pending prior app	plication			
		☐ A copy of the	petition filed in prior applic	ation is attached.				
B.		Conditional Petitio	n for Extension of Time in F	Prior Application				
		(complete	this item, if previous item n	ot applicable)				
		A conditional petit application.	ion for extension of time is	being filed in the pendir	ng prior			
		☐ A copy of the	conditional petition filed in	the prior application is a	ttached.			

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.1]—page 3 of 5)

	Cla	imed				
		(complete applicable item (a), (b) and/or (c) below)				
(a)		This application discloses and claims only subject matter disclosed in the prio application whose particulars are set out above and the inventor(s) in this application are				
		☐ the same.				
		less than those named in the prior application. It is requested that the following inventor(s) identified for the prior application be deleted:				
		(type name(s) of inventor(s) to be deleted)				
(b)		This application discloses and claims additional disclosure by amendment at a new declaration or oath is being filed. With respect to the prior application the inventor(s) in this application are				
		☐ the same.				
		☐ the following additional inventor(s) have been added:				
		(type name(s) of inventor(s) to be added)				
(c)		The inventorship for all the claims in this application are				
		XI the same				

 $\hfill \square$ not the same. An explanation, including the ownership of the various claims

at the time the last claimed invention was made

is submitted.will be submitted.

20. Further Inventorship Statement Where Benefit of Prior Application(s)

21.	Aba	andonment of Prior Application (if applicable)
		Please abandon the prior application at a time while the prior application is pending, or when the petition for extension of time or to revive in that application is granted, and when this application is granted a filing date, so as to make this application copending with said prior application.
NOT	pa re	eccording to the Notice of May 13, 1983 (103, TMOG 6-7), the filing of a continuation or continuation-in- cart application is a proper response with respect to a petition for extension of time or a petition to twive and should include the express abandonment of the prior application conditioned upon the canting of the petition and the granting of a filing date to the continuing application.
22.		ition for Suspension of Prosecution for the Time Necessary to an Amendment
WAR	RNING	"The claims of a new application may be finally rejected in the first Office action in those situations where (A) the new application is a continuing application of, or a substitute for, an earlier application, and (B) all the claims of the new application (1) are drawn to the same invention claimed in the earlier application, and (2) would have been properly finally rejected on the grounds of art of record in the next Office action if they had been entered in the earlier application." M.P.E.P., § 706.07(b), 7th ed.
NOT	ar	There it is possible that the claims on file will give rise to a first action final for this continuation application and for some reason an amendment cannot be filed promptly (e.g., experimental data is being gathered) may be desirable to file a petition for suspension of prosecution for the time necessary.
		(check the next item, if applicable)
		There is provided herewith a Petition To Suspend Prosecution for the Time Necessary to File An Amendment (New Application Filed Concurrently)
23.	Sma	all Entity (37 C.F.R. § 1.28(a))
		Applicant has established small entity status by the filing of a statement in parent application / on
		☐ A copy of the statement previously filed is included.
		: See 37 C.F.R. § 1.28(a).
WAR	INING	"Small entity status must not be established when the person or persons signing the statement can unequivocally make the required self-certification." M.P.E.P., § 509.03, 7th ed. (emphasis added).
24.	NOT	TIFICATION IN PARENT APPLICATION OF THIS FILING
		A notification of the filing of this (check one of the following)
		☐ continuation
.•		☐ continuation-in-part
		☐ divisional

is being filed in the parent application, from which this application claims priority under 35 U.S.C. \S 120.

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.1]—page 5 of 5)

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(Small Entity-Non-Profit [7-3]-page 1 of 3)

I hereby state that rights under contract or law have been conveyed to, and remain with, the nonprofit organization, with regard to the above identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 C.F.R. 1.9(c), if that person made the invention, or by any concern that would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e)

*NOTE: Separate statements are required from each named person, concern or organization having rights to the invention as to their status as small entities. (37 CFR 1.27).

Each such person, concern or organization having any rights in the invention is listed below:

X	No such person, concern, or organization exists. Each such person, concern or organization is listed below.								
	DIVIDUAL [SMALL BUSINESS CONCERN	□ NONPROFIT ORGANIZATION						
	DIVIDUAL [SMALL BUSINESS CONCERN	□ NONPROFIT ORGANIZATION						

I acknowledge the duty to file, in this application or patent, notification of any charge in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

(check the following item, if desired)

- NOTE: The following verification statement need not be made in accordance with the rules published on Oct. 10, 1997, 62 Fed. Reg. 52,131, effective Dec. 1, 1997.
- NOTE: "The presentation to the Office (whether by signing, filing, submitting, or later advocating) of any paper by a party, whether a practitioner or non-practitioner, constitutes a certification under § 10.18(b) of this chapter. Violations of § 10.18(b)(2) of this chapter by a party, whether a practitioner or non-practitioner, may result in the imposition of sanctions under § 10.18(c) of this chapter. Any practitioner violating § 10.18(b) may also be subject to disciplinary action. See §§ 10.18(d) and 10.23(c)(15)." 37 C.F.R. § 1.4(d)(2).
- I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name of Person Signing	<u>Daniel T. Evon, Director, Contract & Grant A</u> d	ministration
Title in Organization	Michigan State University	
Address of Person Signing _	301 Administration Bldg.	
	East Lansing, MI 48824-1046	
SIGNATURE Jame	Date 2/11/80	:

(Small Entity-Non-Profit [7-3]-page 3 of 3)